

corrections in a “job ticket.” A job ticket is a file, such as an Adobe PDF job ticket, that records the changes and corrections desired by the customer.

[0128] When image data corresponding to image 950, or to portions of images 950, at specific resolutions is transmitted from server 910 to client 970, a client composing tool 990, such as that described hereinabove with reference to FIG. 6, inserts the image 950 or portions of image 950 into the image-less document, and a document viewer 1000 then displays a document page, or a desired portion of a document page, at a desired resolution on the video display.

[0129] When the customer has finished proofing a document and has recorded his changes and corrections in the job ticket, the job ticket is transmitted from client 910 to server 910. After server 910 receives the customer job ticket, it makes the indicated changes and corrections, and a notification is sent to the customer to re-proof his modified job for final approval. Alternatively, the customer’s re-proofing of the job can be bypassed under appropriate circumstances.

[0130] After a job has been proofed and corrected, and is ready for a full production run, modified image-less document and modified images are combined within a server composing tool 1010 to form a standard document. The resulting standard document is then delivered to a raster image processor 1020 and printed on an appropriate output device.

[0131] In reading the above description, persons skilled in the art will realize that there are many apparent variations that can be applied to the methods and systems described. As one such variation, regarding the image file formats, the images extracted from an original document in generating an image-less document may be embodied in one or more of several standard image formats such as BMP, Flashpix, JPEG, PNG, GIF or TIF, or in one or more non-standard image formats. Similarly, the images extracted from an original document may be stored in one of more of several standard image formats, or in non-standard image formats, and this may entail converting the images from a first format in which they were extracted to a second format in which they are stored.

[0132] Additionally, regarding the data transmission protocols, transmission of image-less documents and image data over the Internet between a server and a client can be performed according to one of several Internet protocols, such as HyperText Transfer Protocol (HTTP).

[0133] Additionally, screen resolution images can be embedded within an image-less document, together with references to stored images, so that when an image-less document is received it can be immediately displayed at an initial screen resolution scale, without the need to download separate image data. When a user zooms in on such a document, zoomed image portions are downloaded and substituted for the initial screen resolution images.

[0134] Additionally, a server can stream additional image data while a client is viewing a document, without the client specifically requested such additional image data. That is, rather than have the image data transmission be entirely client-driven, of a “pull” nature, the image data transmission may be partially or completely server-driven, of a “push” nature. When the image data transmission is partially client-driven and also partially server-driven, client requests pref-

erably are given priority over and pre-empt transmission of “pushed” data. When the image data transmission is completely server-driven, the client is restricted in interactively viewing the document to the extent that the necessary data has already been delivered.

[0135] Additionally, the image-less document transmitted from a server to a client may be transmitted in separate pages, each page being delivered upon request by the client, rather than transmitting the entire document at once.

[0136] Additionally, a server may enforce access control, requiring a client to be authenticated (e.g. with a username and password) before delivering a document or image data. Such access control ensures that a user cannot access someone else’s job.

[0137] Additionally, a server may include various auxiliary document management features, such as indexing and searching capabilities.

[0138] Additionally, with reference to FIG. 5, an initial view of the document can include one or more thumbnails, each thumbnail corresponding to one of the document pages.

[0139] Additionally, with reference to FIG. 5, when a user clicks on an image within a document, the image may be displayed in its own separate window, instead of or in addition to being displayed within the document page. The user can then interactively inspect the image in the separate window by zooming in and out of the image, and by panning through the image in several directions. Use of a separate window for inspecting images offers a way to focus on the image itself, independent of the document page in which it is contained.

[0140] Additionally, with reference to FIG. 7, an on-line proofing system may enable a customer to make his own changes and corrections, rather than mark them in a job ticket and send the job ticket back to the server.

[0141] It will be appreciated by persons skilled in the art that the present invention is not limited by what has been particularly shown and described hereinabove. Rather the present invention includes combinations and sub-combinations of the various features described hereinabove as well as modifications and extensions thereof which would occur to a person skilled in the art and which do not fall within the prior art.

1-100. (canceled)

101. A method for on-line proofing of a document containing an image, wherein an original document on which the document to be proofed is based also contains content other than an image, the method comprising the operations of:

sending, by a client computer, a document request to a document server computer;

transmitting a document corresponding to the document request from the document server computer to the client computer in response to the document request, the document having a reference to an image;

sending, by the client computer, an image data request to an image server computer based on the reference to the image;